

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008263**Date Inspected:** 21-Jul-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Li Hong Fei, Guo Peng, Xu Yumi, <del>CWI Present</del> Zhong			<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>

**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 11**

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

FCAW welding of weld joint ESD1-FASA4-2A/E-28 located on east tower, lift 4, skin A. Welder was identified as 068858. ZPMC QC was identified as CWI Li Hong Fei (QC1). The welding variables recorded by QC1 appeared to comply with WPS-B-T-2332-Tc-P4-F. Also present at this location and appearing to be monitoring the welding was ABF representative Luo Lai Quan.

SMAW tack welding of weld joint WSD1-FBSA4-2A/C-58, 59 located on west tower, lift 4, skin B. Welders were identified respectively as 053310, 203793. ZPMC QC was identified as CWI Guo Peng (QC2). The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-B-T-2312-Tc-P5. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Xu Jin Long, who was not a CWI. Also present at this location and appearing to be monitoring the welding was ABF representative Luo Lai Quan.

**OBG Trial Assembly Area**

This QA Inspector, George Goulet, randomly observed the following work in progress in the trial assembly area:

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3AW, panel point 20 – installation and snug tightening of floor beam to bottom plate heavy clips

4AE, panel point 25 – FCAW welding of weld joint SSD20-PP025-004 located on the north longitudinal diaphragm. ZPMC QC's were identified as CWI Xu Yumin (QC3) and Li Jia (QC4). The welding variables recorded by QC3 appeared to comply with WPS-345-FCAW-2G(2F)-repair-1 identified as the WPS on B-CWR629 presented to this QA Inspector, George Goulet, by QC3 for this welding.

3BE, panel point 23 – touch-up painting.

4BW, panel point 27, west side – ZPMC MT and occasional grinding, then MT again.

Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

SAW welding of weld joint SSTL3-1B/K-81B located on south tower, lift 3. Welders were identified respectively from top to bottom as 052916, 209105, 050295, 040460. ZPMC QC was identified as CWI Liu Zhong An (QC5). The welding variables recorded by QC5 appeared to comply with WPS-B-T-2221-C-U2b-S-2. Also present at this location and appearing to be monitoring the welding was ABF representative Ma Zhen Yi.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

This QA Inspector, George Goulet, asked each QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC monitoring the welding showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 134-8257-0045, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer

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